

Amendments to the Claims:

This listing of claims will replace all prior versions and listings of claims in the application:

Listing of Claims:

Claims 1-20 (cancelled)

1 Claim 21 (currently amended): ~~Method~~ A method for measuring
2 a talking quality of a telephone link in a
3 telecommunications network, ~~characterized by the following~~
4 ~~steps~~ the method comprising the steps of:

5 combining, ~~by means of combining means,~~ a talker speech
6 signal ($s(t)$) and a returned signal ($r(t)$), which occurred
7 in a return channel of the telephone link as a consequence
8 of the transmission of the talker speech signal in a forward
9 channel of the telephone link, to yield a combined speech
10 signal ($s'(t)$); and

11 subjecting the combined speech signal with respect to
12 the talker speech signal to an objective measurement
13 technique for measuring a perceptual quality of speech
14 signals; and

15 producing an output signal ($q(t)$) which represents an
16 estimated value ~~concerning~~ of the talking quality.

1 Claim 22 (currently amended): ~~Method~~ The method according to
2 claim 21, ~~characterized in that~~ wherein the combining step
3 comprises the step of ~~a signal addition of adding~~ the
4 returned signal and the talker speech signal in the
5 electrical domain.

1 Claim 23 (currently amended): ~~Method~~ The method according to
2 claim 22, ~~characterized in that the signal addition wherein~~
3 the adding step is preceded by the step of an inverse
4 filtering of either the returned signal, or the talker
5 speech signal.

1 Claim 24 (currently amended): ~~Method~~ The method according to
2 claim 22, ~~characterized in that~~ wherein the returned signal
3 ~~(e4)~~ is taken off from a two-wire part of the telephone
4 link.

1 Claim 25 (currently amended): ~~Method~~ The method according to
2 claim 22, ~~characterized in that~~ wherein the returned signal
3 ~~(e2, e3)~~ is taken off from a four-wire part of the telephone
4 link.

1 Claim 26 (currently amended): ~~Method~~ The method according to
2 claim 21, ~~characterized in~~ wherein the combining step
3 comprises, ~~a signal combination of~~ the returned signal and
4 the talker speech signal ~~in the acoustical domain~~.

1 Claim 27 (currently amended): ~~Method~~ The method according to
2 claim 26, ~~characterized in that~~ wherein the talker speech
3 signal ~~(s)~~ and the returned signal ~~(e5)~~ are combined by
4 means of a microphone, which is additional to ~~the~~ a
5 microphone in a telephone set and located near an ear of a
6 talking user of the telephone set.

1 Claim 28 (currently amended): ~~Method~~ The method according to
2 claim 21, ~~characterized in that~~ wherein the talker speech
3 signal and the returned signal are taken off from an
4 ~~established~~ the telephone link.

1 Claim 29 (currently amended): ~~Method~~ The method according to
2 claim 28, ~~characterized in that wherein~~ the ~~produced~~ output
3 signal ~~of the objective measurement~~ is fed to a control
4 input of an echo-minimizing device included in the
5 ~~established~~ telephone link.

1 Claim 30 (currently amended): ~~Method~~ The method according to
2 claim 29, ~~characterized in that wherein~~ the output signal
3 ~~of the objective measurement~~ is fed to a monitoring system
4 ~~(F, G)~~.

1 Claim 31 (currently amended): ~~Method~~ The method according to
2 claim 21, ~~characterized in that wherein~~ the talker speech
3 signal, and either the combined signal or the returned
4 signal ~~are signals laid down~~ is stored in a data base.

1 Claim 32 (currently amended): ~~Device~~ A device for measuring
2 a talking quality of a telephone link in a
3 telecommunications network, the device comprising
4 measurement means for an objective measuring of a perceptual
5 quality of speech signals, the measuring means ~~being~~
6 ~~provided with~~ comprising:

7 a first input port for receiving a first speech
8 signal ($s(t)$; s) transmitted or to be transmitted via a
9 forward channel of the telephone link;

10 a second input port for receiving a second speech
11 signal ($s'(t)$; s'), which is a function of the first speech
12 signal affected in the telecommunications network;

13 an output port for providing an output signal
14 representing an estimated value of the perceptual quality of
15 the second speech signal with respect to the first speech
16 signal;i

17 ~~characterised in that, and~~
18 signal combination means for combining the first speech
19 signal $(s(t); s)$ and a third speech signal $(r(t); e)$,
20 ~~thereby generating so as to generate~~ the second speech
21 signal $(s'(t); s')$, the first and third speech signal being
22 respectively a talker speech signal and a returned signal
23 which occurred in a return channel of the telephone link as
24 a consequence of the transmission of the talker speech
25 signal in a forward channel of the telephone link, and the
26 output signal representing an estimated value ~~concerning of~~
27 the talking quality.

1 Claim 33 (currently amended): ~~Device~~ The device according to
2 claim 32, ~~characterized in that~~ wherein the signal
3 combination means comprise a signal adder.

1 Claim 34 (currently amended): ~~Device~~ The device according to
2 claim 32, ~~characterized in that~~ wherein the signal
3 combination means ~~are provided with~~ comprise first and
4 second signal inputs, which are coupled to the forward
5 channel and the return channel of ~~an established the~~
6 telephone link, respectively, ~~and that~~ the first input port
7 ~~of the measurement means is being~~ coupled to the forward
8 channel, and the second input port ~~of the measurement means~~
9 ~~is being~~ coupled to the signal output of the signal-
10 combination means.

1 Claim 35 (currently amended): ~~Device~~ The device according to
2 claim 34, ~~characterized in that~~ wherein the output port is
3 coupled to a control input of an echo-minimizing device
4 included in the ~~established~~ telephone link.

1 Claim 36 (currently amended): ~~Device~~ The device according to
2 claim 32, ~~characterized in that~~ wherein the first and the
3 second input ports are coupled to a data base of speech
4 signals, ~~on in~~ in which the first speech signal, and either the
5 second speech signal or the echo signal, are ~~laid down~~
6 stored.

1 Claim 37 (currently amended): ~~Telephone link~~ A telephone-link
2 circuit for a telephone link in a telecommunications
3 network, ~~comprising~~ wherein the telephone-link circuit has a
4 forward channel and a return channel, and an echo-minimizing
5 device included between the forward channel and the return
6 channel, ~~characterised in that~~ the telephone-link circuit
7 further ~~comprises~~ comprising:

8 a signal combiner provided with first and second signal
9 inputs, which are coupled to the forward channel and the
10 return channel of ~~a the~~ the telephone link, respectively, and
11 ~~with~~ having a signal output; and

12 an objective measurement device, provided with a first
13 input port coupled to the forward channel and a second input
14 port coupled to the output of the signal combiner, and an
15 output port, for processing a first speech signal received
16 on the first input port, ~~and~~ with a second speech signal
17 received on the second input port, and for producing an
18 output signal on the output port, said output signal
19 representing an estimated value ~~concerning~~ of the talking
20 quality.

1 Claim 38 (currently amended): ~~Telephone link~~ The
2 telephone-link circuit according to claim 37, ~~characterized~~
3 ~~in that~~ wherein the output port of the measurement device

4 has a signal coupling with a control input of the
5 echo-minimizing device.

1 Claim 39 (currently amended): ~~Telephone link~~ The
2 telephone-link circuit according to claim 37, ~~characterized~~
3 ~~in that there is~~ further ~~provided for~~ comprising a detection
4 device for detecting ~~the~~ speech status over the established
5 telephone link, and ~~for~~ a switch included in the signal
6 coupling with the control input, the switch being controlled
7 by the detection device.

1 Claim 40 (currently amended): ~~Telephone link~~ The
2 telephone-link circuit according to claim 37, ~~characterized~~
3 ~~in that~~ wherein the output port of the measurement device
4 has a signal coupling ~~(F, G)~~ with a monitoring system.